




**POLYMER MEMBRANES ON THE BASIS OF POLYVINYLIDENE FLUORIDE, A  
PROCESS FOR THE PRODUCTION THEREOF AND THEIR USE**

**Patent number:** DE3904544  
**Publication date:** 1990-08-16  
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**Classification:**  
- international: (IPC1-7): B01D61/14; B01D69/06; B01D69/08;  
B01D71/34; C08J5/18; C08L27/16  
- european: B01D67/00J14; B01D71/34; B01D71/52; C08J7/04L71;  
C08L27/16  
**Application number:** DE19893904544 19890215  
**Priority number(s):** DE19893904544 19890215

**Also published as:**

 WO9009232 (A1)  
 EP0409950 (A1)  
 US5151193 (A1)

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Abstract not available for DE3904544

Abstract of corresponding document: **US5151193**

PCT No. PCT/DE90/00091 Sec. 371 Date Nov. 2, 1990 Sec. 102(e) Date Nov. 2, 1990 PCT Filed Feb. 12, 1990 PCT Pub. No. WO90/09232 PCT Pub. Date Aug. 23, 1990. The present invention relates to polymer membranes on the basis of polyvinylidene fluoride (PVDF), a process for the production thereof and their use for ultrafiltration. The membranes are produced according to known techniques from homogeneous solutions containing 5 to 30% by weight of PVDF and 0.01 to 30% by weight of sulfonic acids and/or their salts, obtainable by sulfonation of the polyetheretherketones of formula (I) and/or subsequent neutralization of the sulfonic acids. The membranes are then treated with methanolic solutions containing 0.1 to 5% by weight of the above-mentioned sulfonic acids and/or their salts. This process supplies membranes having excellent hydrophilic properties, high thermal and mechanical stabilities and high trans-membrane flows.  $-(O-p-C_6H_4-O-p-C_6H_4-CO-p-C_6H_4)_n-(I)$

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